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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,390	02/20/2004	Otman Adam Basir	60,449-095	6422

26096 7590 04/25/2007  
CARLSON, GASKEY & OLDS, P.C.  
400 WEST MAPLE ROAD  
SUITE 350  
BIRMINGHAM, MI 48009

EXAMINER

TO, TUAN C

ART UNIT PAPER NUMBER

3663

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/783,390	BASIR ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tuan C. To	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2007 and 16 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 15-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 25-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/16/07, 01/3/07</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-3, 5-9, 14, and 25-29 are rejected under 35 U.S.C. 102 (b) as being anticipated by Kung et al. (US 5850470A).

Regarding claims 1 and 25, Kung et al. teaches a system/method for classifying an occupant including the steps of:

Capturing an image of an occupant area (figure 1; column 4, lines 1-10, video camera is used to capture image of human face); dividing the image into a plurality of subimages of different predetermined spatial (figure 4, column 3, lines 9-22, the face image is divided to facial features and hairline features, the image scene is preprocessed into subimages); generating a spatial feature matrix of the image based upon the plurality of subimages (figure 5 represents a spatial feature matrix of the image based upon plurality of subimages); analyzing the spatial feature matrix; and classifying an occupant in the occupant area based upon said step (figure 5).

As to claim 2, Kung et al. further teaches "processing the image to account for lighting and motion before "analyzing the spatial feature matrix" (abstract).

As to claim 3, Kung et al. further teaches "smoothing the classification of the occupant over time" (column 4, lines 14-22).

As to claims 5-8, and 26-28, Kung et al. clearly teaches applying expert classifier algorithm to the spatial feature matrix, analyzing the spatial feature matrix (figure 5). Kung et al. also teaches that a plurality of images of known occupant classifications of the occupant area (figure 5) are generated.

As to claims 9, and 29, Kung teaches "analyzing the spatial feature matrix based on the location from which the image is captured relative to the occupant area" (see abstract, the position (location) of the object's image such as the eyes).

As to claim 14, Kung et al. shows that the plurality of subimages represented in figure 4 overlap one another.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4, 10-13, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung et al. (US 5850470A) and in view of Baloch et al. (US 6459974B1).

Regarding claim 4, Kung et al. teaches the limitations of claim 1 except for "determining whether to activate an active restraint based upon the classification of an occupant".

Baloch et al. teaches a system/method for classifying an occupant for the purposes of airbag deployment (see abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system/method of Kung et al. to include the teaching of activating a restraint device based upon the classification of an occupant as taught in

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Baloch et al. in order to determined whether enable or disable the restraint system (e.g. airbag) based on the type of occupant on the seat behind the airbag.

As to claims 10 and 30, Baloch et al. discloses that based on the occupant's location from which the occupant's image is captured, the system parameters are adjusted (column 6, lines 38-57; column 12, lines 43-61).

Regarding claims 11-13, and 31, Kung et al. fails to teach "analyzing the spatial feature matrix based upon system parameters including an orientation or a location from which the image is captured relative to the occupant area".

Baloch et al. provided as teaching such that feature (column 6, lines 38-45).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system/method of Kung et al. to include the teaching as taught in Baloch et al for the advantage of accurately activate or deactivate the restraint system based upon the position of the occupant on the seat (e.g., rear facing infant seat or front facing child seat).

### ***Response to Applicant's Arguments***

Applicant's arguments with respect to claims 1-14, and 25-31 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusions***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (571) 272-6985. The examiner can normally be reached on from 8:00AM to 5:00PM.

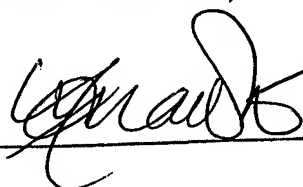
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner,

A handwritten signature in black ink, appearing to read 'Tuan C To', is written over a horizontal line.

Tuan C To

April 6, 2007